

Data Structures

Practical 4

Objective:

WAP to print a fibonacci series using recursion.

Code:

```
#include <stdio.h>
int fibonacci(int x);
int main()
{
    int a,i=0;
    printf("Enter the number of terms : ");
    scanf("%d",&a);
    printf("fibonacci series : ");
    for( i ; i<a ; i++){
        printf("%d ",fibonacci(i));
    }
    return 0;
}
int fibonacci(int x){
    if(x==0 || x==1){
        return x;
    }
    else{
        return fibonacci(x-1) + fibonacci(x-2);
    }
}
```

Output:

```
C:\Users\Hp\OneDrive\Desktop\Untitled1.exe
Enter the number of terms : 11
fibonacci series : 0 1 1 2 3 5 8 13 21 34 55
-----
Process exited after 4.396 seconds with return value 0
Press any key to continue . . .
```